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(19)

(54) IMPROVEMENTS IN OR RELATING TO A PACKAGE

(71) We, SALVE S.A., a Swiss Body Corporate, of 73, Route de la Vignettaz-Sud, CH-1770 Fribourge, Switzerland, do hereby declare the invention for which we pray that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following statement:

The present invention relates to a package and more particularly the invention relates to a package which contains a member having one or more surfaces provided with an adhesive, the adhesive being covered by one or more protective foils.

The invention will be described in this Specification with reference to a package containing a medical plaster as used for treating small wounds, but this description of the invention is given merely by way of example and it is to be appreciated that the invention may find other applications.

A conventional adhesive plaster for use in treating small wounds, cuts or abrasions, comprises a strip of flexible material, which may be a fabric material or a plastics material, this strip being provided, on one surface thereof, with a self-adhesive layer. In the central region of the surface of the strip provided with the self-adhesive layer is a medical dressing comprising gauze or a similar material, and in many instances this dressing is impregnated with an antiseptic or the like.

The self-adhesive layer provided on an adhesive plaster of this type is usually protected by one or more foils which are usually made of a plastics material. It is intended that the foils should be pulled off the strip of flexible material to expose the adhesive layers before the plaster is used to cover a wound. The removal of these protective foils is troublesome, and often requires the use of both hands. It is frequently the practice to utilise two protective foils, one provided at each end of the strip of flexible material, the foils being loosely superimposed or overlapped in the centre of the strip of flexible material, that is to say in the region of the medicated gauze pad. In using such a plaster the protective foils are gently eased away from the medical dressing, i.e. the gauze pad, to expose the gauze pad, the gauze pad being placed in contact with the surface of the wound. Subsequently the protective foils are removed by pulling them in opposite directions away from the gauze pad, this action serving to stretch the flexible strip and, on skilful manipulation of the protective foils, to bring the adhesive coated surface of the flexible strip into firm contact with the skin of the patient adjacent the wound. If a plaster is applied in this way there is a risk that the surface of the wound will be irritated, since the gauze pad is brought into firm contact with the surface of the wound, and furthermore there is a considerable risk that the gauze pad will not be correctly positioned over the wound, and it will be appreciated that once the plaster has been applied it is not possible to remove the plaster and reposition the plaster.

The present invention seeks to provide a package containing a member provided with an adhesive layer, which adhesive layer is protected by a protective foil or the like, in which the removal of the protective foil or the like is facilitated, and in which the above described disadvantages of the prior art are reduced or obviated. More particularly the present invention seeks to provide a package containing a member having an adhesive large protected by a fort, which may be a medical plaster, such medical plaster comprising a flexible strip with one surface provided with an adhesive layer, a central region of that surface being provided with a medical dressing, an adhesive zone on each side of the dressing being covered by a removable protective foil or the like, the said package being provided with means for automatically removing at least part of the protective foil

when the member is removed from the package.

According to one aspect of this invention there is provided a package containing a substantially flat member having an adhesive surface layer substantially entirely covered by one or more portions of a protective foil which are provided in addition to said package, said package comprising a base sheet adjacent said member and means directly or indirectly connecting one portion of the foil to the base sheet so that said one portion of the foil will be removed from the corresponding area of the said adhesive surface layer during removal of said member from said package.

Preferably said foil is immediately adjacent said base sheet, and said foil is directly secured to the base sheet.

Alternatively the surface of said member opposite to the adhesive surface layer is adjacent said base sheet, and said foil is secured to the base sheet indirectly by means of a band secured to the foil and secured to the base sheet.

Conveniently two foil portions are provided, one foil portion having a protruding free edge region, which free edge region is connected to said base sheet.

Preferably said foil is connected to the base sheet by means on both sides of said member.

According to another aspect of this invention there is provided a package containing a substantially flat member having an adhesive surface layer substantially entirely covered by two flap-free portions of protective foil which are provided in addition to said package. a region of one foil overlapping part of the second foil, said package comprising a base sheet adjacent said member and means connecting a region of said one foil to the base sheet so that said one foil will be removed from the corresponding area of said adhesive layer during removal of said member from said package.

Preferably said overlapping region of said one foil is the region connected to the base sheet, and said portion of said one foil is secured to the base sheet by an adhesive coated band.

According to a further aspect of this invention there is provided a package containing a substantially flat member having an adhesive surface layer substantially entirely covered by two portions of protective foil which are provided in addition to the package, a region of one foil overlapping part of the second foil, said package comprising a base sheet adjacent said member and means connecting a region of said one foil to the base sheet so that said one foil will be removed from the corresponding area of said adhesive layer during removal of said member from said package, said connecting means directly connecting said foil to said basesheet. Said connecting means may comprise adhesive, heat welding or the like.

According to yet a further aspect of this invention there is provided a package containing a substantially flat member having an adhesive surface layer substantially entirely covered by two portions of protective foil which are provided in addition to package, a region of one foil overlapping part of the second foil, said package comprising a base sheet adjacent said member and means connecting a region of said one foil to the base sheet so that said one foil will be removed from the corresponding area of said adhesive layer during removal of said member from said package, each foil being provided with a folded back flap at the free edge thereof, one said flap being the region connected to the base sheet.

Preferably said flaps overlap, and advantageously said one flap is secured to the base sheet by an adhesive coated band.

Said package may comprise said base sheet and a second superimposed sheet secured thereto, the sheets engaging one or more lugs provided on said foil to connect the foil to the package.

Preferably said package includes a separate sheet which is connected to said base sheet to define a poxket, said member being located within said pocket with part thereof protruding from the pocket.

Conveniently said member comprises a medical plaster constituted by a flexible strip having said adhesive surface layer on one side thereof and a medical dressing substantially centrally disposed on said one side, the adhesive being covered by two removable foils one of which is directly or indirectly connected to said base sheet at a free edge thereof located in the central region of the plaster.

According to yet another aspect of this invention there is provided a method of making a package containing a substantially flat member having an adhesive surface layer substantially entirely covered by one or more portions of a protective foil which are provided in addition comprising the steps of locating said member adjacent a base sheet and directly or indirectly connecting one portion of the foil to the base sheet so that one portion of the foil will be removed from the corresponding area of said adhesive surface layer during removal of said member from said package.

In order that the invention may be more readily understood and so that further features thereof may be appreciated the invention will now be described by way of example with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a multiple pack in accordance with the invention, the

multiple pack comprising a plurality of medical plasters each retained within a respective individual package,

Figure 2 is a perspective view of one package of the multiple pack of Figure 1 with part folded back to expose the interior of the package,

Figure 3 is a perspective view corresponding to Figure 2 showing the package when the plaster is partially withdrawn from the package,

Figure 4 is a perspective view of another package in accordance with the invention with part folded back to expose the interior of the package,

Figure 5 is a perspective view corresponding to Figure 4 showing the package when the plaster is partially withdrawn from the package,

Figure 6 is a perspective view of yet another package in accordance with the invention, with part folded back to expose the interior of the package,

Figure 7 is a perspective view corresponding to Figure 6 showing the package when the plaster is partially withdrawn from the package, and

Figure 8 is a perspective view of a wallet containing a number of multiple packages as illustrated in Figure 1.

Referring now to the accompanying drawings Figure 1 shows a multiple pack 1 containing a number of flat medical plasters 2, the plasters being located side by side. The multiple pack is provided with perforations or lines of mechanical weakness 3 between adjacent plasters 2, so that separate discrete packages, each comprising a plaster and the surrounding portion of the multiple pack 1 may be removed from the rest of the multiple pack 1.

The multiple pack 1 is formed by two superimposed sheets 4, 5 of aluminium, paper or plastics material, one suitable material being that sold under the Registered Trade Mark COSIL. The two sheets 4, 5, are superimposed and the sheets are joined together by means of adhesive, welding, or in some other way depending upon the nature of the material selected, along one side edge 6 of the package and in the regions 7 between adjacent plasters 2. The arrangement is such that when one package containing a plaster 2 has been removed from the rest of the multiple pack 1, as shown in Figure 2 the side edges 8, 9 of the removed portion of the package are constited by portions of the sheets 4, 5, that are joined together. Thus it will be appreciated that each package that is removed from the multiple pack 1 constitutes a pocket or the like, and when the package is in the form as illustrated in Figure 1 the pockets are each open at one end 10 and can readily be separated from each other.

The plasters 2 may be located within the multiple pack 1 during production thereof, and in this case the plasters 2 are located between the sheets of material 4, 5 before they are joined together. The multiple pack 1 may be made of indefinite length when virtually endless sheets 4, 5 are utilised. The plasters 2 are arranged in such a way that one end 11 of each plaster projects slightly from the completed multi-pack 1 and so that the opposite end 12 of the plaster is located at a small predetermined distance from the side edge 6 of the multi-pack which forms the bottom of each pocket.

Referring now to Figures 2 and 3 of the accompanying drawings plaster 2 illustrated consists of a flexible strip of material 13 which may be formed of a plastics material or a fabric, this strip 13 being provided with an adhesive layer 14, 15 at least on each side of a gauze dressing 16 which is located substantially centrally on the strip 13. The gauze dressing 16 may be impregnated with a suitable antiseptic. The regions of the adhesive layer 14, 15 on either side of the central dressing 16 are protected by means of removable protective foils 17, 18 which are separate from the package which extend over the dressing 16, so that the dressing is also protected and is maintained in a substantially sterile condition. It will be appreciated that the protective foils overlap each other in the region of the dressing 16.

In this embodiment of the invention one of the removable protective foils 18 is connected indirectly to the sheet 4 which forms part of the package, and the arrangement is such that when the plaster 2 is withdrawn from the package the said foil 18 that is connected to the package remains connected to the package, and thus that protective foil is removed from the region 15 of the adhesive layer initially protected by the foil 18.

Consequently, when the plaster 2 has been removed from the package at least one of the regions 15 of the adhesive film is exposed ready for use.

Referring again to Figures 2 and 3 a band of material 21 is provided, the band of material having, on one face thereof, a strongly adherent adhesive. This band 21 is firmly adhered, by the adhesive, to the lowermost sheet 4 and extends across the plaster 2. The band 21 is also firmly adhered to a portion of one of the protective foils 18.

Thus, the band 21 is connected both to the protective foil 18, and to the base sheet 4 that forms part of the package.

Figure 3 illustrates what happens when the plaster 2 is withdrawn from the package by grasping the protruding end 11 of the plaster and withdrawing the plaster 2 from the package. The band 21 remains secured to sheet 4 of the package and also remains secured to the foil 18 with the result that as the plaster 2 is removed from the package the foil 18 is

separated from the rest of the plaster 2 and the gauze dressing 16 is revealed. As the plaster is completely removed from the package the foil 18 is removed entirely from the plaster 2. The plaster 2 may then be utilised to dress a small wound or the like by placing the exposed adhesive 15 adjacent the wound, urging the gauze dressing 16 gently into contact with the wound and subsequently removing the foil 17 to expose the adhesive zone 14, this adhesive zone 14 finally being brought into contact with the skin of the patient.

It will be appreciated that in manufacturing the embodiment described above and illustrated in Figures 2 and 3 in the form of a multi-pack the plasters will be superimposed upon the first sheet 4 of the multi-pack, with the foils in position, and subsequently an elongate band 21 will be located over the plasters and over the base sheet 4 forming the multi-pack. Subsequently the uppermost sheet 5 will be positioned on the base sheet 4 and the sheets will be secured together to define the separate pockets, and finally the score lines or perforations 3 will be provided to facilitate the removal of individual packages from the remainder of the multi-pack. The score lines will pass through the band 21. Thus it will be appreciated that multi-packs comprising packages as illustrated in Figures 2 and 3 may be readily manufactured with a continuous production process.

Whilst the invention has been described above with reference to one particular embodiment it is to be appreciated that many modifications and alterations within the scope of the claims may be made to this particular embodiment of the invention.

In a second embodiment of the invention illustrated in Figures 4 and 5 (in which reference numerals common to Figures 2 and 3 denote corresponding features) both of the protective foils 17, 18 are provided with a flap 19, 20 respectively that is folded back to be superimposed upon the major portion of the foil, the flaps being superimposed over the dressing 16. The band 21 is secured directly to the flap 20 provided on foil 18, the band 21 also being secured to the lowermost sheet 4 of the two superimposed sheets forming the pocket. This particular embodiment will operate in a very similar way to the described above as can be seen from the accompanying drawings, but the provision of the flap 20 facilitates the withdrawal of the plaster from the package, and the provision of flap 19 facilitates the subsequent removal of foil 17.

In a further embodiment of the invention illustrated in Figures 6 and 7 (in which reference numerals common to Figures 2 and 3 denote like features) the adhesive band 21 is not provided, and in this embodiment of the invention one protective foil 18 is connected directly by means of an adhesive 22, or by means of heat welding, to the uppermost sheet 5 of the sheets 4, 5 constituting the package as illustrated, which is termed the base sheet. In manufacturing this embodiment of the invention the plaster is located on the lowermost sheet 4 of the package as illustrated, a portion of the foil 18 is rendered tacky either by applying an adhesive, or by heating the portion of the foil 18, and subsequently the uppermost sheet 5 of the package is located in position over the plaster, this uppermost sheet 5 of the package being firmly connected to the foil by the adhesive or by heat welding. Again this package will operate in a very similar manner to that described above, as is illustrated in Figure 7.

Figure 8 of the accompanying drawings illustrates four multi-packs 1, each in accordance with the present invention, when incorporated into a wallet 23. Each of the multi-packs 1 contains four plasters 2. The multi-packs 1 are placed on a member 24 of card or the like. A flap of the member 24 is folded to embrace the multi-packs 1 and the assembly is secured by staples 26 or the like, care being taken to ensure that the staples do not pass through the plasters 2. The wallet 23 may be closed, in a manner similar to a book of matches, by tucking a further flap 26 of the member 24 beneath the free edge of flap 25. It is to be appreciated that, if the plasters 2 are mounted in a wallet as illustrated in Figure 8 the individual plasters 2 may be removed from the appropriate pockets without removing any portion of the packages from the wallet, merely by grasping the protruding end of the plaster and pulling. The plaster, when removed from the wallet, will have a foil 18 removed, and the foil 17 still in position.

A wallet as illustrated in Figure 8 may contain packages of any of the three types described above.

In another embodiment of the invention (not illustrated) the foil 18 may be provided with two laterally extending lugs adjacent the free end thereof, aht lugs being secured between the sheets 4, 5 and when the sheets are adhered together in regions 7. Thus the foil 18 could be directly connected to the package.

Whilst the invention has been described with specific reference to medical plasters it is to be appreciated that the invention is not restricted solely to this application. Also whilst the invention has been described with specific reference to embodiments which each comprise a package in the form of an envenlope, a package in accordance with the invention could comprise a member having an adhesive surface layer protected by a foil or the like mounted on a single support sheet or the like, the foil being directly or indirectly connected to the support sheet or the like so

that when the member is removed from the package the foil is automatically separated from the adhesive surface layer on the member.

WHAT WE CLAIM IS:

1. A package containing a substantially flat member having an adhesive surface layer substantially entirely covered by one or more portions of a protective foil which are provided in addition to said package, said package comprising a base sheet adjacent said member and means directly or indirectly connecting one portion of the foil to the base sheet so that said one portion of the foil will be removed from the corresponding area of the said adhesive surface layer during removal of said member from said package.

2. A package according to claim 1 wherein said foil is immediately adjacent said base sheet and said foil is directly secured to the base sheet.

3. A package according to claim 1 wherein the surface of said member opposite to the adhesive surface layer is adjacent said base sheet, and said foil is secured to the base sheet indirectly by means of a band secured to the foil and secured to the base sheet.

4. A package according to any one of the preceding claims wherein two foil portions are provided, one foil portion having a protruding free edge region, which free edge region is connected to said base sheet.

5. A package according to claim 3 or 4 wherein said foil is connected to the base sheet by means on both sides of said member.

6. A package containing a substantially flat member having an adhesive surface layer substantially entirely covered by two flap-free portions of protective foil which are provided in addition to said package, a region of one foil overlapping part of the seconf foil, said package comprising a base sheet adjacent said member and means connecting a region of said one foil to the base sheet so that said one foil will be removed from the corresponding area of said adhesive layer during removal of said member from said package.

7. A package according to claim 6 wherein said overlapping region of said one foil is the region connected to the base sheet.

8. A package according to claim 6 or 7 wherein said portion of said one foil is secured to the base sheet by an adhesive coated band.

9. A package containing a substantially flat member having an adhesive surface layer substantially entirely convered by two portions of protective foil which are provided in addition to the package, a region of one foil overlapping part of the second foil, said package comprising a base sheet adjacent said member and means connecting a region of said one foil to the base sheet so that said one foil will be removed from the corresponding area of said adhesive layer during removal of said member from said package, said connecting means directly connecting said foil to said base sheet.

10. A package according to claim 9 wherein said overlapping region of said one foil is the region connected to the base sheet.

11. A package containing a substantially flat member having an adhesive surface layer substantially entirely covered by two portions of the protective foil which are provided in additio to the package a region of one foil overlapping part of the second foil, said package comprising a base sheet adjacent said member and means connecting a region of said one foil to the base sheet so that said one foil will be removed from the corresponding area of said adhesive layer during removal of said member from said package, each foil being provided with a folded back flap at the free edge thereof, one said flap being the region connected to the base sheet.

12. A package according to claim 11 wherein said flaps overlap.

13. A package according to claim 11 or 12 wherein said one flap is secured to the base sheet by an adhesive coated band.

14. A package according to claim 1 wherein said package comprises said base sheet and a second superimposed sheet secured thereto, the sheets engaging one or more lugs provided on said foil to connect the foil to the package.

15. A package according to any one of the preceding claims wherein said package includes a separate sheet which is connected to said base sheet to define a pocket, said member being located within said pocket with part thereof protruding from the pocket.

16. A package according to any one of the preceding claims wherein said member comprises a medical plaster constituted by a flexible strip having said adhesive surface layer on one side thereof and a medical dressing substantially centrally disposed on said one side, the adhesive being covered by two removal foils one of which is directly or indirectly connected to said base sheet at a free edge thereof located in the central region of the plaster.

17. A multi-pack comprising a plurality of packages according to any one of the preceding claims detachably connected together.

18. A wallet containing one or more multi-packs according to claim 17.

19. A method of making a package containing a substantially flat member having an adhesive surface layer substantially entirely covered by one or more portions of a protective foil which are provided in addition to the package comprising the steps of locating said member adjacent a base sheet and directly or

indirectly connecting one portion of the foil to the base sheet so that one portion of the foil will be removed from the corresponding area of said adhesive surface layer during removal of said member from said package.

20. A multi-pack substantially as herein described with reference to and as shown in Figure 1 of the accompanying drawings.

21. A package substantially as herein described with reference to and as shown in Figures 2 and 3 of the accompanying drawings.

22. A package substantially as herein described with reference to and as shown in Figures 4 and 5 of the accompanying drawings.

23. A package substantially as herein described with reference to and as shown in Figures 6 and 7 of the accompanying drawings.

24. A wallet substantially as herein described with reference to and as shown in Figure 8 of the accompanying drawings.

25. A method of making a package substantially as herein described with reference to the accompanying drawings.

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1574347 COMPLETE SPECIFICATION

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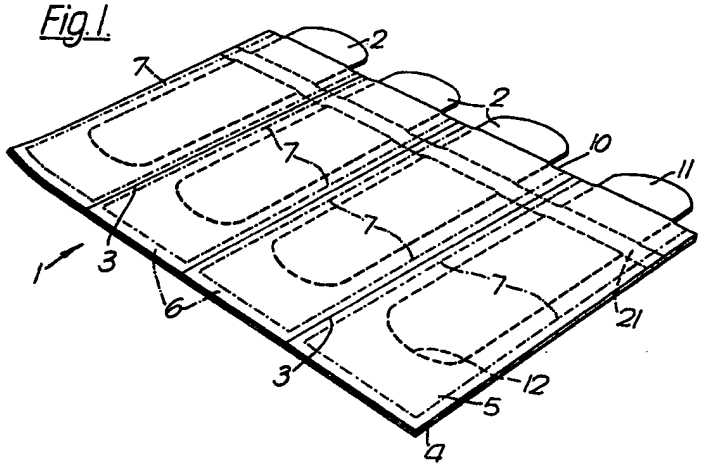
Sheet 1

Fig.1.



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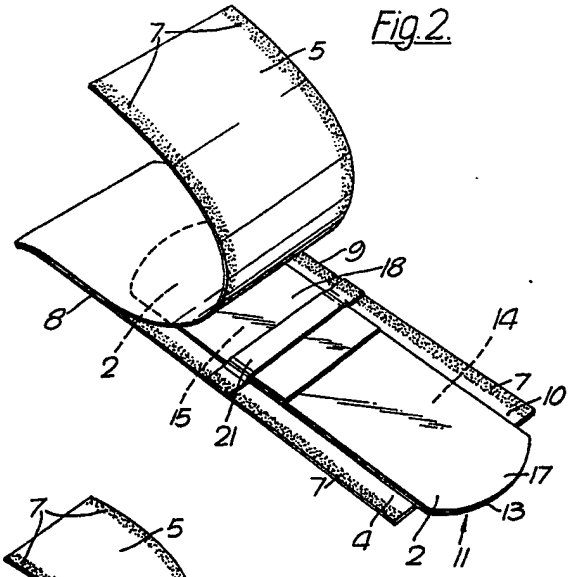
Sheet 2

Fig.2.



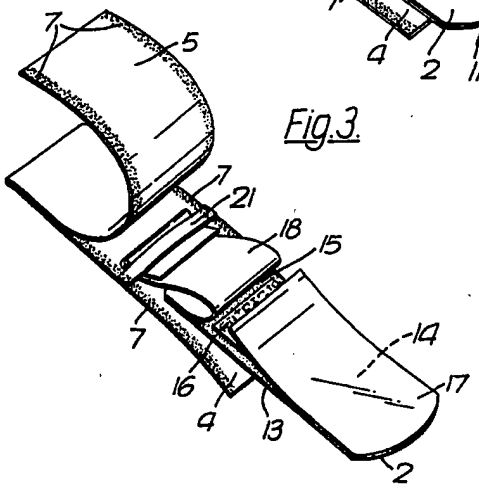


Fig.3.

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Sheet 3

Fig.4.

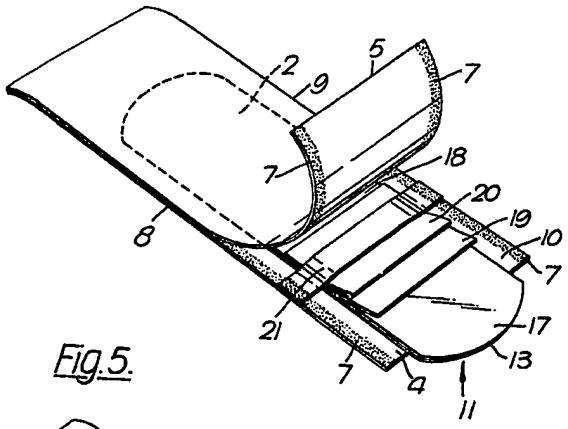
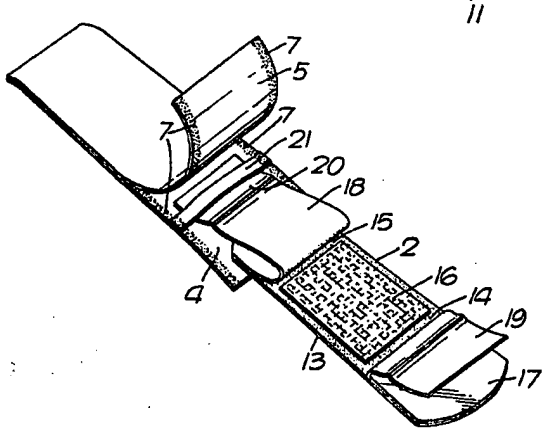


Fig.5.



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Sheet 4

Fig.6.

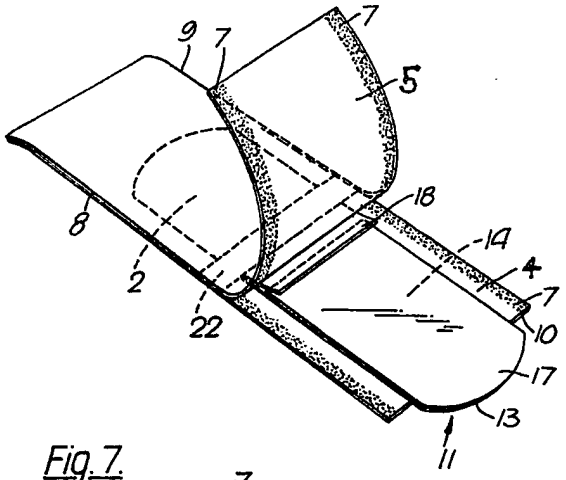
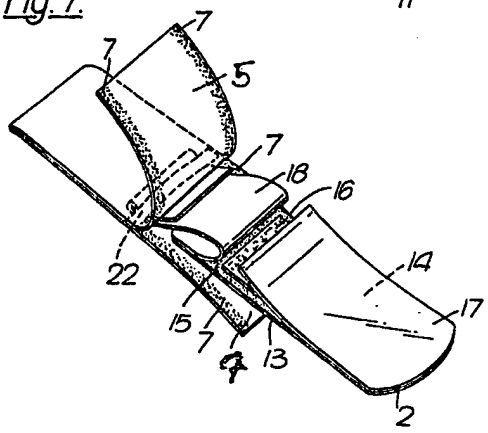


Fig.7.



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Sheet 5

Fig.8.